

ABSTRACT OF THE DISCLOSURE

There is provided a vibrator ~~10~~ which is integrally coupled to a rotating shaft ~~12~~ of a motor. A groove portion ~~13~~ in which the rotating shaft ~~12~~ is fitted is formed in an eccentric load portion ~~11~~, and side walls ~~14~~ bulging from the eccentric load portion ~~11~~ and forming both side edge portions of the groove portion ~~13~~ are ~~formed~~ ^{provided}. A portion ~~14c~~ of a tip portion end surface ~~14a~~ of the side wall ~~14~~, except an outer peripheral portion ~~14b~~ of the side wall ~~14~~ and at a side of the groove portion, is caulked from an opening side of the groove portion ~~toward~~ ^{at} ~~thereto~~ to a bottom side, so that the vibrator ~~10~~ is integrally coupled to the rotating shaft.